

DATE: 1/29/2019

FILE: P.I.# 0013600
Meriwether County / GDOT District 3 - Thomaston
SR 109 Bridge Replacement at Former
Norfolk-Southern Rail Line

FROM:  for Brent Story, State Design Policy Engineer

TO: SEE DISTRIBUTION

SUBJECT: APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

Distribution:

Hiral Patel, Director of Engineering
Joe Carpenter, Director of P3
Albert Shelby, Director of Program Delivery
Carol Comer, Director, Division of Intermodal
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator
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Bobby Hilliard, Program Control Administrator
Paul Tanner, State Transportation Planning Administrator
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Bill DuVall, State Bridge Engineer
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Erik Rohde, State Project Review Engineer
Monica Flournoy, State Materials Engineer
Patrick Allen, State Utilities Engineer
Eric Conklin, State Transportation Data Administrator
Attn: Systems & Classification Branch
Benny Walden, Statewide Location Bureau Chief
Michael Presley, District Engineer
Adam Smith, District Preconstruction Engineer
Scott Parker, District Utilities Manager
Kenneth Wicks, Project Manager
BOARD MEMBER - 3rd Congressional District

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
LIMITED SCOPE PROJECT CONCEPT REPORT**

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>0013600</u>	
GDOT District: <u>3</u>	County: <u>Meriwether</u>	
Federal Route Number: <u>N/A</u>	State Route Number: <u>109</u>	
Project Number: _____	<u>N/A</u>	

This project proposes to replace the bridge on SR 109 @ NS #719349N in Greenville

Submitted for approval:

<u>Benjamin F. Rohde III</u> Consultant Designer (Volkert, Inc)	5/11/18 Date
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<u>Hamberly W. T. J. J. J.</u> State Program Delivery Administrator	1/8/18 Date
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<u>[Signature]</u> GDOT Project Manager	10/4/2018 Date
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Recommendation for approval:

Eric Duff*/EKP State Environmental Administrator	6/25/2018 Date
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FOR Christina Barry*/EKP State Traffic Engineer	7/9/2018 Date
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Bill DuVall*/EKP State Bridge Engineer	6/25/2018 Date
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Michael Presley*/EKP District Engineer	6/25/2018 Date
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- ☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- ☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

Paul Tanner*/EKP State Transportation Planning Administrator	7/6/2018 Date
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Approval:

Concur: <u>Hilal Bittel</u> GDOT Director of Engineering	1-4-19 Date
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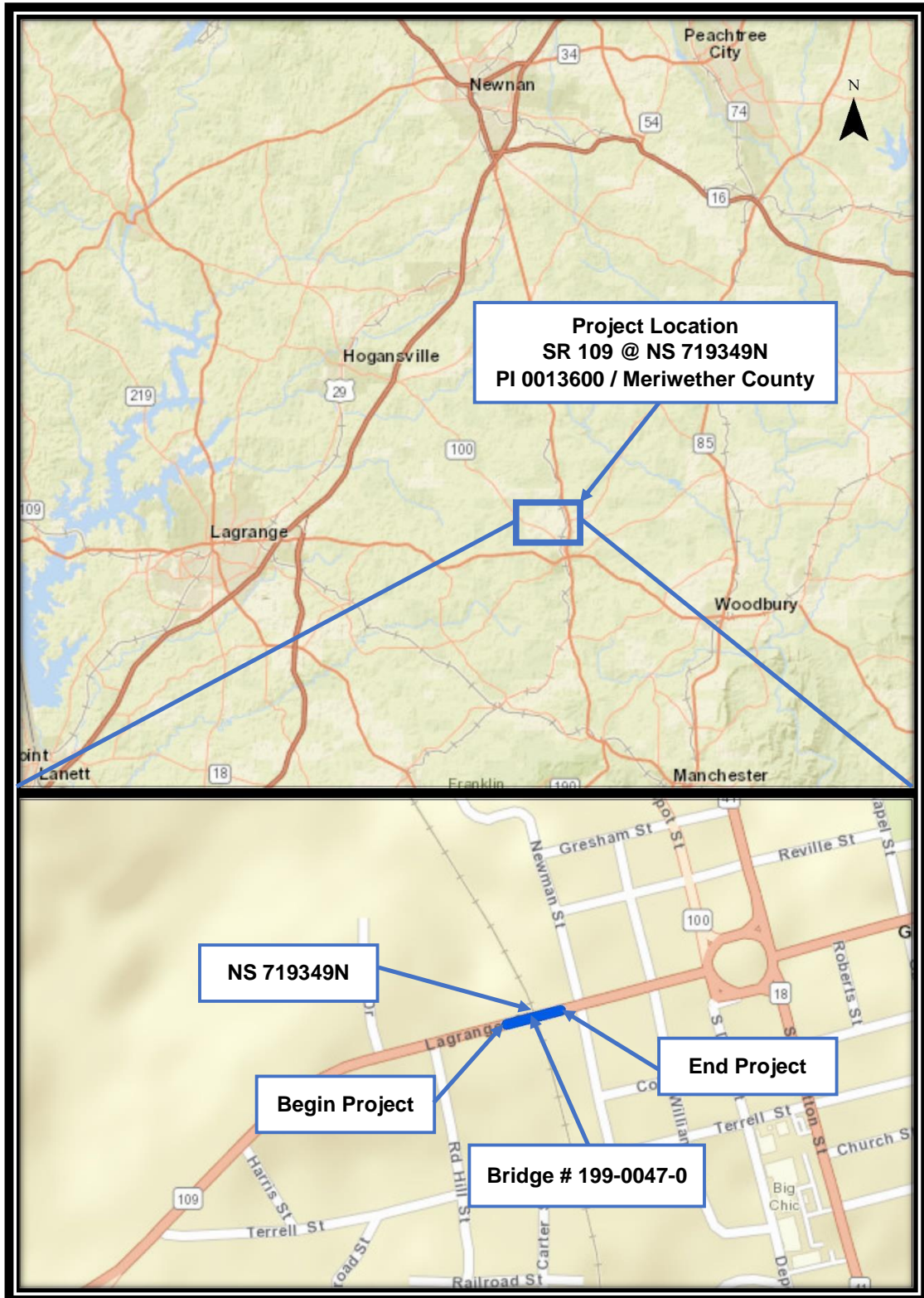
Approve: <u>Margaret S. Pivke</u> GDOT Chief Engineer	1/29/19 Date
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* - Recommendation on File

Other Recommendations Received:

Erik Rohde*/EKP - Office of Engineering Services	7/9/2018
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PROJECT LOCATION MAP



**PI 0013600 / Meriwether County
SR 109 @ NS #719349N Bridge Replacement**

County: Meriwether

PLANNING & BACKGROUND DATA

Project Justification Statement: The bridge on SR 109 over Norfolk Southern Railroad, Structure ID 199-0047-0, was built in 1937. The bridge consists of three spans of steel beams on concrete caps and concrete columns. The bridge was designed using an H-15 vehicle, which is below the current design standards. The overall condition of this bridge would be classified as fair. The deck is in fair condition. The deck has spalls with exposed rebar and transverse cracks that extend through the deck with efflorescence. The superstructure is in fair condition. The steel beams have varying section loss in all spans of the bridge. The substructure is in satisfactory condition. Due to the structural integrity of the bridge pertaining to the design vehicle, the deterioration of the deck, and the section loss in the beams, replacement of this bridge is recommended. (Justification Statement was provided by Office of Bridge Design)

Existing conditions: This section of SR 109 is located in Meriwether County inside the Greenville city limits. The bridge structure, ID 199-0047-0, carries SR 109 over an abandoned Norfolk Southern railroad line. The railroad tracks have been removed and the property is now owned by TYO, Inc. The existing three span 84-ft bridge consists of steel beams supported on concrete caps and concrete columns. The typical section on the bridge consists of two lanes with a bridge roadway width of 30-ft, with 5-foot sidewalks on both sides of the bridge and a bridge deck out-to-out width of 42.17-ft. The approach roadway typical section consists of two 16-ft lanes with curb and gutter, a grass strip and sidewalks on both sides of the roadway.

Other projects in the area: None

MPO: N/A - not in an MPO

TIP #: N/A

Congressional District(s): 3

Federal Oversight: ☐ PoDI ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic: AADT 3300 ^{EEK} 24 HR T: 16%
 Current Year (2017): 3250 Open Year (2022): 3725
 Traffic Projections Performed by: Volkert, Inc.
 Date approved by the GDOT Office of Planning: 12/5/2017

Design Year (2042): 4550

Functional Classification (Mainline): Rural Minor Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:

Warrants met: ☐ None ☐ Bicycle ☒ Pedestrian ☐ Transit

Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required? ☒ No ☐ Yes
 Feasible Pavement Alternatives: ☒ HMA ☐ PCC ☐ HMA & PCC

DESIGN AND STRUCTURAL

Description of Proposed Project: The Right-of-Way owned by Norfolk Southern (NS) has been transferred to TYO Inc.; therefore, the reference to NS should be removed from the project description. The project proposes replacing the structurally deficient bridge on SR 109 over TYO, Inc. property (previously NS #719349N) at the current location. The total length of the project is approximately 300 ft. beginning 108 ft. west of the existing bridge abutment and ending 108 ft. east of the existing bridge abutment.

Major Structures:

Structure ID	Existing	Proposed
ID 199-0047-0 Along S.R.109 @ NS #719349N	S.R. 109 consists of Structure ID 199-0047-0 which is a bridge that consists of three spans of steel beams on concrete caps and concrete columns. The bridge deck width is 42.17 ft and the bridge roadway curb to curb width is 30.0 ft with 5 ft sidewalks on each side of the bridge. The total length of the bridge is 84 ft.	The proposed structure is approximately 100 ft. long by 43.42 ft. wide. This includes two 15-foot lanes with 5.5-foot sidewalks on both sides of the bridge.

Accelerated Bridge Construction (ABC) techniques anticipated: ☒ No ☐ Yes

Next Beams could be used to accelerate the bridge construction for this bridge replacement project. A two span (40' and 60' spans) layout would be used to meet the necessary span length requirements for NEXT Beams. The unbalanced layout would allow for a possible future pedestrian trail along the abandoned Norfolk Southern railroad parcel currently owned by TYO Inc.. Other Accelerated Bridge Construction techniques were considered but not recommended for this project based on the following considerations:

- The projected ADT and % trucks exceed the criteria for Cored Slabs and Adjacent Box Beams.
- A Lateral Slide and a Self-Propelled Modular Transport are not feasible due to site constraints and cost.

The estimated time saving and cost difference are negligible and are offset based on using NEXT Beams compared to AASHTO Beam, therefore ABC is not anticipated.

Mainline Design Features: SR 109 @ NS #719349N

Feature	Existing	Policy	Proposed
Typical Section			
- Number of Lanes	2		2
- Lane Width(s)	15 ft.	11 – 12 ft.	15 ft.
- Median Width & Type	N/A	N/A	N/A
- Border Area Width	5 – 25 Ft.	10 – 16 ft.	8 – 10 ft.
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width	N/A	N/A	N/A
- Sidewalks	5 ft.	5 ft.	5 ft.
- Auxiliary Lanes	N/A		N/A
- Bike Accommodations	N/A	N/A	N/A
Posted Speed	35 mph		35 mph
Design Speed	35 mph	35 mph	35 mph
Minimum Horizontal Curve Radius	NC	250	NC
Maximum Superelevation Rate	N/A	4%	N/A
Maximum Grade	3.9%	5%	3.9%
Access Control	By Permit	By Permit	By Permit
Design Vehicle	Unknown		WB-67
Pavement Type	HMA		HMA

*According to current GDOT design policy if applicable

Is the project located on a NHS roadway? ☒ No ☐ Yes

Design Exceptions/Design Variances to GDOT and/or FHWA Controlling Criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: 1) It is anticipated that the intersection at SR 109 and Newnan Street will require a Design Variance for Intersection Sight Distance. 2) It is anticipated that a variance will be needed for not including guardrail at the bridge ends.

Lighting required: ☒ No ☐ Yes

Off-site Detours Anticipated: ☐ No ☐ Undetermined ☒ Yes

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant

TMP Components Anticipated: ☒ TTC

INTERCHANGES AND INTERSECTIONS

Major Interchanges/Intersections: None

Intersection Control Evaluation (ICE) Required: ☒ No ☐ Yes

Roundabout Peer Review Required: ☒ No ☐ Yes ☐ Completed – Date:

UTILITY AND PROPERTY

Railroad Involvement: None

Utility Involvements:

BellSouth d/b/a AT&T Georgia (Telecommunications)

City of Greenville (Water and Sanitary Sewer)

Charter Communications (Cable TV)

Atlanta Gas Light (Natural Gas)

Georgia Power Distribution (Electric Distribution and Electric Transmission)

SUE Required: ☐ No ☒ Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: 50ft. Proposed width: 80ft.
Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined
Easements anticipated: ☐ None ☒ Temporary ☐ Permanent ☐ Utility ☐ Other

Permanent easements need to be purchased with the right to place utilities.

Anticipated total number of impacted parcels:	<u>5</u>
Displacements anticipated:	Businesses: <u>0</u>
	Residences: <u>0</u>
	Other: <u>0</u>
Total Displacements:	<u>0</u>

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: During the Concept Team Meeting, the City of Greenville officials requested placing a decorative parapet along the proposed bridge to preserve the historic appearance of the corridor.

Context Sensitive Solutions Proposed: A decorative parapet has been added to preserve the historic appearance of the corridor.

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

NEPA: ☐ PCE ☒ CE ☐ EA-FONSI
GEPA: ☐ Type A ☐ Type B ☐ None

Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

Water Quality Requirements:

MS4 Compliance – Is the project located in an MS4 area? ☒ No ☐ Yes

Is Non-MS4 water quality mitigation anticipated? ☒ No ☐ Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated: The proposed project would require coordination with Norfolk Southern.

Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes
Carbon Monoxide hotspot analysis required? ☒ No ☐ Yes

NEPA/GEPA Comments & Information:

NEPA: The anticipated environmental document for the proposed project is a Categorical Exclusion. A Section 4(f) evaluation could be required, dependent on impacts to the historic district, eligible bridge, and any recreation resources.

Ecology: An Ecology report has not been finalized. However, Early Coordination with the Georgia Department of Natural Resources and US Fish and Wildlife Service and field survey is complete. There were no aquatic resources or habitat for federally protected species present within the project area.

History: A History report has not yet been finalized. However, the history survey has found that the project is located within the Greenville Historic District and the bridge would be eligible for the National Register of Historic Places (NRHP).

Archaeology: An archeology report has not been finalized. However, the field survey did not result in the discovery of an archaeological site that would be recommended as eligible for the NRHP.

Noise: Noise studies have not been prepared. A Type III assessment is anticipated.

Public Involvement: No public involvement has taken place. A public detour open house is anticipated, as the preferred alternative proposes the use of an off-site detour. The Public Information Open House (PIOH) will be held on August 23, 2018.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Is Federal Aviation Administration (FAA) coordination anticipated? ☒ No ☐ Yes

Project Meetings:

Monthly Team Meeting October 4, 2017

Scoping Meeting October 31, 2017

Concept Team Meeting December 5, 2017

Other coordination to date: Early detour coordination letters have been sent to the local government, EMS, and school board.

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Volkert, Inc.
Design	Volkert, Inc.
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	Atkins \ Volkert, Inc.
Environmental Mitigation	Atkins \ Volkert, Inc.
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate and Funding Responsibilities:

	PE Activities		ROW	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Funded By	GDOT	GDOT	GDOT	GDOT	GDOT	
\$ Amount	\$544,000	\$50,000	TBD	\$200,000	\$1,358,023	\$2,152,023
Date of Estimate	3/7/2016	12/12/2017	Requested	12/1/2017	8/3/2018	

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION

Preferred Alternative: Replace the existing bridge at the current elevation and location using an off-site detour.			
Estimated Property Impacts:	5	Estimated Total Cost:	\$2,152,023
Estimated ROW Cost:	TBD	Estimated CST Time:	18 Months
Rationale: This alternative was determined to be feasible because replacing the existing bridge at the current elevation would reduce the project limits and consequently the impacts to the potential historic properties.			

No-Build Alternative: No proposed improvements within project limits.			
Estimated Property Impacts:	0	Estimated Total Cost:	0
Estimated ROW Cost:	0	Estimated CST Time:	0
Rationale: This alternative was not selected because this alternative would not address the structural integrity issues of the bridge.			

Alternative 1: Remove the existing bridge and place embankment at the current location of the existing bridge using an off-site detour.			
Estimated Property Impacts:	5	Estimated Total Cost:	\$1,694,841
Estimated ROW Cost:	TBD	Estimated CST Time:	18 Months
Rationale: This alternative was not selected because the placement of an embankment and closing the bridge opening would adversely impact TYO, Inc's access along the abandoned railroad corridor.			

Alternative 2: Replace the existing bridge with a reinforced concrete pedestrian culvert using an off-site detour.			
Estimated Property Impacts:	5	Estimated Total Cost:	\$2,005,320
Estimated ROW Cost:	TBD	Estimated CST Time:	18 Months
Rationale: This alternative was not selected because the placement of a pedestrian culvert would significantly reduce the horizontal and vertical clearance of the existing bridge opening and therefore adversely impact TYO, Inc's land use along the abandoned railroad corridor. A culvert would also limit TYO, Inc's access along the corridor.			

Additional Comments/ Information: None

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical Section
3. Preliminary Profile
4. Cost Estimate
5. Concept Utility Report
6. Utility Cost Estimate
7. Mitigation Cost Estimate Supporting Document
8. Traffic Memo
9. Detour Map
10. Bridge Inventory Report
11. Concept Team Meeting Minutes



4/28/2016
GPLN

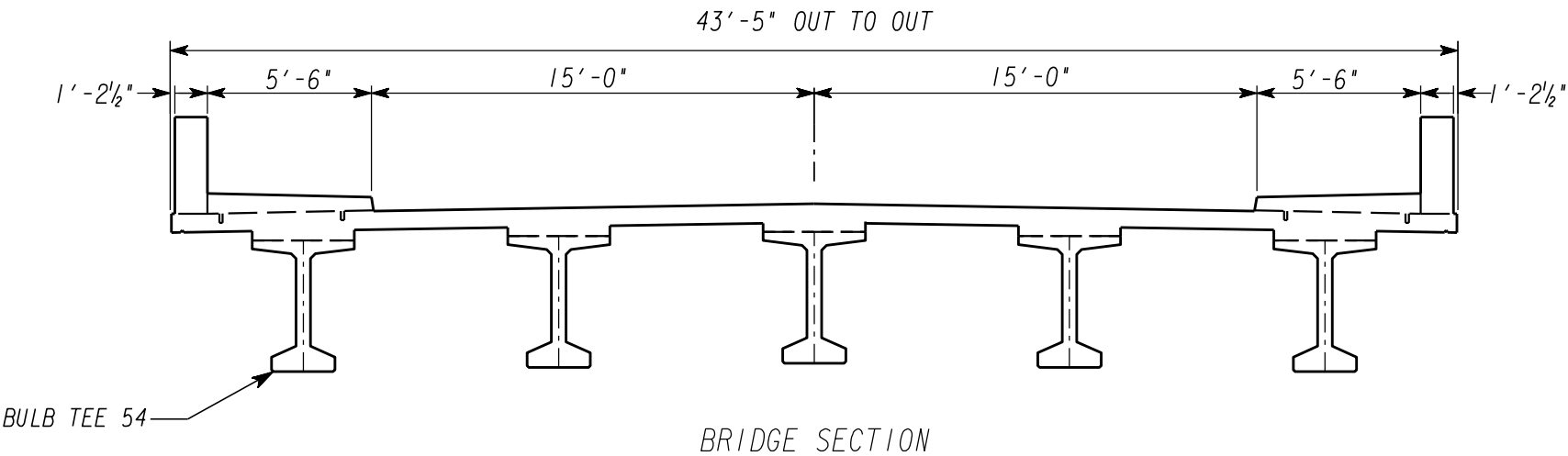
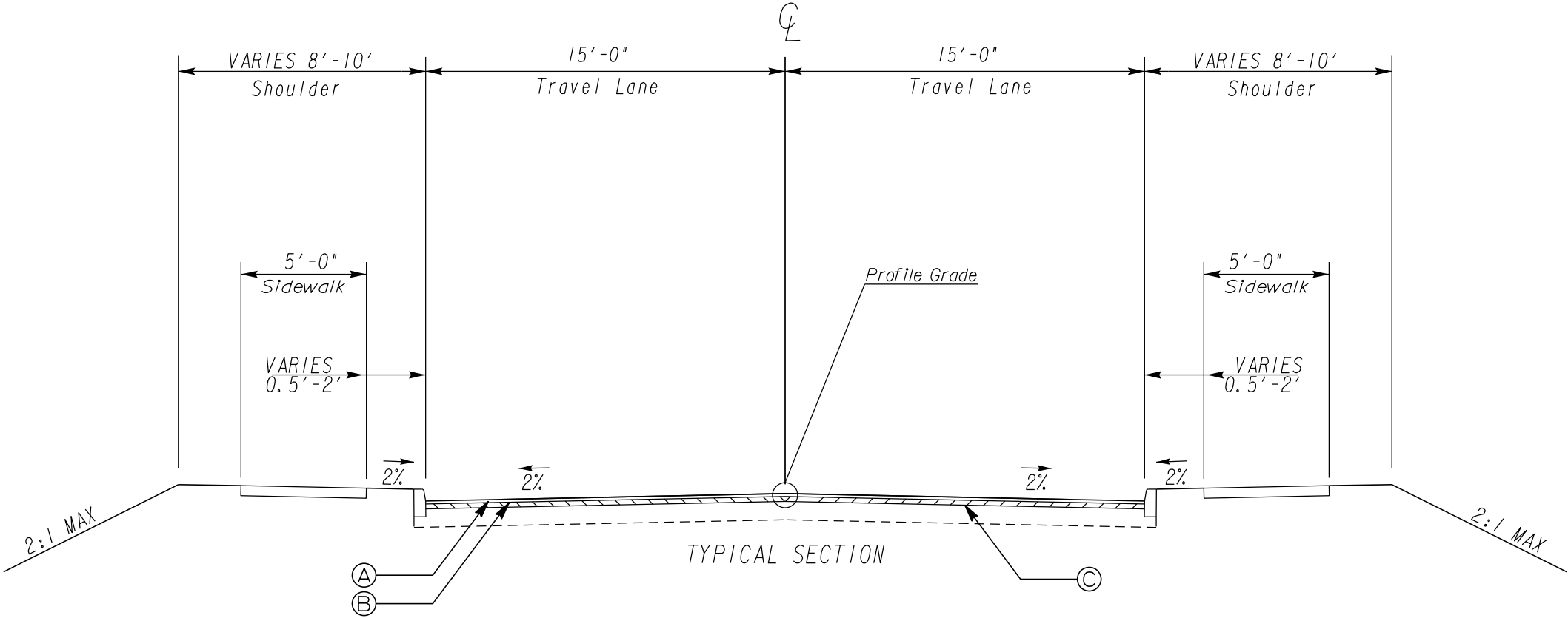
SCALE IN FEET

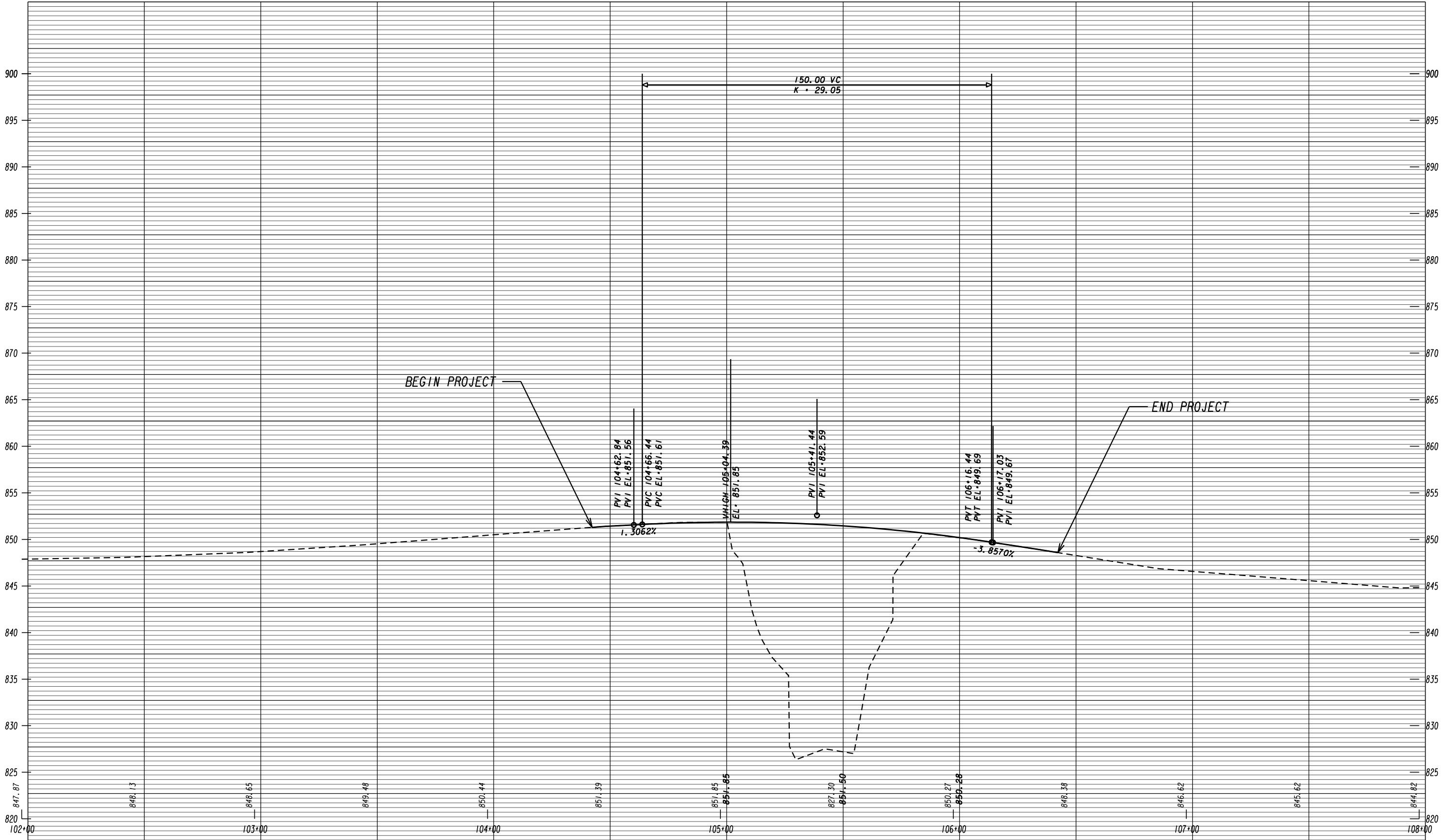
REVISION DATES		

CONCEPT LAYOUT			
SR 109 @ NS • 719349N IN GREENVILLE			
PREFERRED ALT: REPLACE IN-PLACE WITH OFF-SITE DETOUR			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
12-0000

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2
INCL BITUM MATL & H LIME, 165 LBS/SY
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2
INCL BITUM MATL & H LIME, 220 LBS/SY
- Ⓒ 3.5" MILLING





7/31/2015 G20EDG

VOLKERT

SCALE IN FEET
0 20 40 80

REVISION DATES	

MAINLINE PROFILE CONCEPT	
SR 109 @ NS * 719349N IN GREENVILLE	
PREFERRED ALT: REPLACE IN-PLACE WITH OFF-SITE DETOUR	
CHECKED: <div> </div>	DATE: <div> </div>
BACKCHECKED: <div> </div>	DATE: <div> </div>
CORRECTED: <div> </div>	DATE: <div> </div>
VERIFIED: <div> </div>	DATE: <div> </div>

DRAWING No.
15-0000

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. **0013600** OFFICE **Program Delivery**

PROJECT DESCRIPTION

This project proposes to remove the bridge on SR 109 over Norfolk Southern railroad (NS #719349) in Meriwether County.

DATE **August 3, 2018**

From: **Kimberly Nesbit, State Program Delivery Administrator**

To: Lisa L. Myers, State Project Review Engineer
via Email Mailbox: CostEstimatesandUpdates@dot.ga.gov

Subject: REVISIONS TO PROGRAMMED COSTS

MGMT LET DATE **5/15/2020**

PROJECT MANAGER **Jeff Clayton, P.E.**

MGMT ROW DATE **2/15/2019**

PROGRAMMED COSTS (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$ **1,450,000.00**

DATE **7/13/2017**

RIGHT OF WAY \$ **250,000.00**

DATE **7/13/2017**

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$ **1,358,023.33**

RIGHT OF WAY \$

UTILITIES \$ **200,000.00**

*Cost Contains **15** % Contingency

REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:

CONTINGENCY SUMMARY

A. CONSTRUCTION COST ESTIMATE:	\$	1,123,919.23	Base Estimate From CES	
B. ENGINEERING AND INSPECTION (E & I):	\$	56,195.96	Base Estimate (A) x	5 %
C. CONTINGENCY:	\$	177,017.28	Base Estimate (A) + E & I (B) x	15 %
			See % Table in "Risk Based Cost Estimation" Memo	
D. TOTAL LIQUID AC ADJUSTMENT:	\$	890.86	Total From Liquid AC Spreadsheet	
E. CONSTRUCTION TOTAL:	\$	1,358,023.33	(A + B + C + D = E)	

REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Georgia Power - Transmission	\$ -
Georgia Power - Distribution	\$ 200,000.00
Charter Communication	\$ -
BellSouth d/b/a AT&T	\$ -
City of Greenville (Water)	\$ -
City of Greenville (Sewer)	\$ -
Atlanta Gas Light	\$ -
TOTAL	\$ 200,000.00

ATTACHMENTS: (File Copy in the Project Cost Estimate Folder)

Detailed Cost Estimate Printout From TRAQS
Liquid AC Adjustment Spreadsheet

Consultant Validation of Final QC/QA for Construction Cost Estimate Used in This Revision To Programmed Costs

COMPANY NAME: Volkert, Inc.

VALIDATION OF FINAL QC/QA

PRINTED NAME: Benjamin F. Rabun III, P.E.

TITLE: Vice President

SIGNATURE:

DATE: 8/3/2018

STATE HIGHWAY AGENCY

DATE : 08/03/2018

PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0013600 SPEC YEAR: 13
 DESCRIPTION: SR 109 @ NS # 719349N IN GREENVILLE

ITEMS FOR JOB 0013600

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0001	150-1000		LS	TRAFFIC CONTROL - PI 0013600	1.000	150000.00	150000.00
0002	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	91057.55	91057.56
0003	163-0232		AC	TEMPORARY GRASSING	1.000	769.57	769.57
0004	163-0240		TN	MULCH	10.000	376.12	3761.21
0005	163-0300		EA	CONSTRUCTION EXIT	2.000	1492.17	2984.34
0006	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	300.000	2.04	614.59
0007	165-0101		EA	MAINT OF CONST EXIT	2.000	595.90	1191.82
0008	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	2.000	332.78	665.58
0009	167-1500		MO	WATER QUALITY INSPECTIONS	18.000	872.77	15709.87
0010	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	600.000	3.72	2234.36
0011	210-0100		LS	GRADING COMPLETE - PI 0013600	1.000	80000.00	80000.00
0012	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	23.000	76.38	1756.81
0013	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	30.000	111.57	3347.18
0014	413-0750		GL	TACK COAT	22.000	2.57	56.54
0015	432-0214		SY	MILL ASPH CONC PVMT, 3.5 DPTH	275.000	5.55	1526.25
0016	433-1000		SY	REINF CONC APPROACH SLAB	290.000	173.33	50266.35
0017	441-0104		SY	CONC SIDEWALK, 4 IN	120.000	33.17	3981.13
0018	441-5002		LF	CONC HEADER CURB, 6, TP 2	120.000	18.20	2184.75
0019	500-9999		CY	CL B CONC,BASE OR PVMT WIDEN	10.000	180.51	1805.13
0020	540-1102		LS	REM OF EX BR, BR NO - PI 0013600	1.000	162000.00	162000.00
0021	543-9000		LS	CONSTR OF BRIDGE COMPLETE - PI 0013600	1.000	525000.00	525000.00
0022	632-0003		EA	CHANGEABLE MESS SIGN,PORT,TP 3	2.000	7611.50	15223.01
0023	634-1200		EA	RIGHT OF WAY MARKERS	8.000	127.39	1019.18
0024	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	100.000	1.96	196.75
0025	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	400.000	0.83	335.74
0026	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	400.000	0.83	333.22
0027	654-1001		EA	RAISED PVMT MARKERS TP 1	8.000	6.46	51.70
0028	657-1085		LF	PRF PL SD PVT MKG,8,B/W,TP PB	200.000	8.01	1603.51
0029	657-6085		LF	PRF PL SD PVMT MKG,8,B/Y,TPPB	200.000	8.02	1605.73
0030	700-6910		AC	PERMANENT GRASSING	1.000	1440.28	1440.28
0031	700-7000		TN	AGRICULTURAL LIME	2.000	180.47	360.95
0032	700-8000		TN	FERTILIZER MIXED GRADE	1.000	667.34	667.34
0033	700-8100		LB	FERTILIZER NITROGEN CONTENT	45.000	3.75	168.78

ITEM TOTAL	1123919.22
INFLATED ITEM TOTAL	1123919.23

TOTALS FOR JOB 0013600

ESTIMATED COST:	1123919.23
CONTINGENCY PERCENT (0.0):	0.00
ESTIMATED TOTAL:	1123919.23

Concept Utility Report

Project Number: 0013600

District: 3

County: Meriwether

Prepared by: Gene McKissick

P.I. # 0013600

Date: 12/1/2017

Project Description: Bridge replacement on SR 109 at Norfolk Southern Railroad in Greenville

The information provided herein has been gathered from Georgia811 and/or field visits and serves as an estimate. Nothing contained in this report is to be used as a substitute for 1st Submission or SUE.

Are SUE services recommended? Yes Level: ☐ A ☒ B ☐ C ☐ D

Public Interest Determination (PID): ☐ Automatic ☐ Mandatory ☐ Consideration
☐ No Use ☒ Exempt

Is a separate utility funding phase recommended? No

Existing Facilities: Atlanta Gas Light (natural gas), BellSouth d/b/a AT&T Georgia (telecommunications), Charter Communications (cable TV), City of Greenville (water and sanitary sewer), Georgia Power (electric distribution and electric transmission)

Potential Project (Schedule/Budget) Impacts: None

Capital Improvement Projects (Utilities) Anticipated in the Area: None

Project Specific Recommendations for Avoidance/Mitigation: None

Right of Way Coordination: Include the right to place utilities in permanent easements.

Environmental Coordination: None

Additional Remarks: None

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **Meriwether County, P.I. # 0013600**
*Bridge replacement on SR 109 at Norfolk Southern
Railroad in Greenville*

OFFICE Thomaston

DATE 12/1/2017

FROM Scott Parker, District Utilities Manager

TO Jeff Clayton, Project Manager

SUBJECT **PRELIMINARY UTILITY COST (ESTIMATE)**

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON- REIMBURSABLE	REIMBURSABLE
Georgia Power – Transmission (no conflict)	\$0	\$0
Georgia Power - Distribution		\$200,000
Charter Communications	\$15,000	\$0
BellSouth d/b/a AT&T	\$153,500	\$0
City of Greenville (water)	\$134,000	\$0
City of Greenville (sewer)	\$81,300	\$0
Atlanta Gas Light	\$152,500	
TOTALS	\$536,300	\$200,000

Total Preliminary Utility Cost Estimate **\$736,300**.

If you have any questions, please contact Gene McKissick at 706-646-7604.

SP/GM

cc: Yulonda Pride-Foster, State Utilities Preconstruction Manager

From: King, Charles C <charles.c.king@atkinsglobal.com>
Sent: Tuesday, December 12, 2017 8:52 AM
To: Eshagieh, Abbas
Cc: Borovich, Henry; Rabun, Ben; Dyson, Wendy E
Subject: BB2, Contract 5 - Section 404 mitigation costs

Abbas,

Good morning. Below are conservative estimates of Section 404 mitigation costs for each project in BB2 to include in the revised concept reports. These estimates should more than cover the actual costs until we can accurately determine the impacts and actual mitigation credits required.

0008598 - \$100K (We will include this in our report and plan to submit this week.)

0013600 - \$50K

0013717 - \$100K

0013734 - \$100K

0013960 - \$50K

Please contact Henry with any questions. Thanks.

C. Chris King, PE
Project Manager | Sr. Engineer, Transportation Design

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Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Meriwether County
P.I. # 0013600

OFFICE Planning

DATE December 5, 2017

FROM Cynthia L. VanDyke, State Transportation Planning Administrator

TO Kimberly Nesbitt, State Program Delivery Administrator
Attention: Jeff Clayton

SUBJECT **Design Traffic Forecasts** for SR 109 at NS#719349N in Greenville

Per request, we have reviewed the consultant's design traffic forecasts for the above project. Based on the information furnished, we find the design traffic forecasts to be satisfactory, and the design traffic forecasting task to be complete for the above project. The reviewed and approved design traffic forecasts for the above project are as follows:

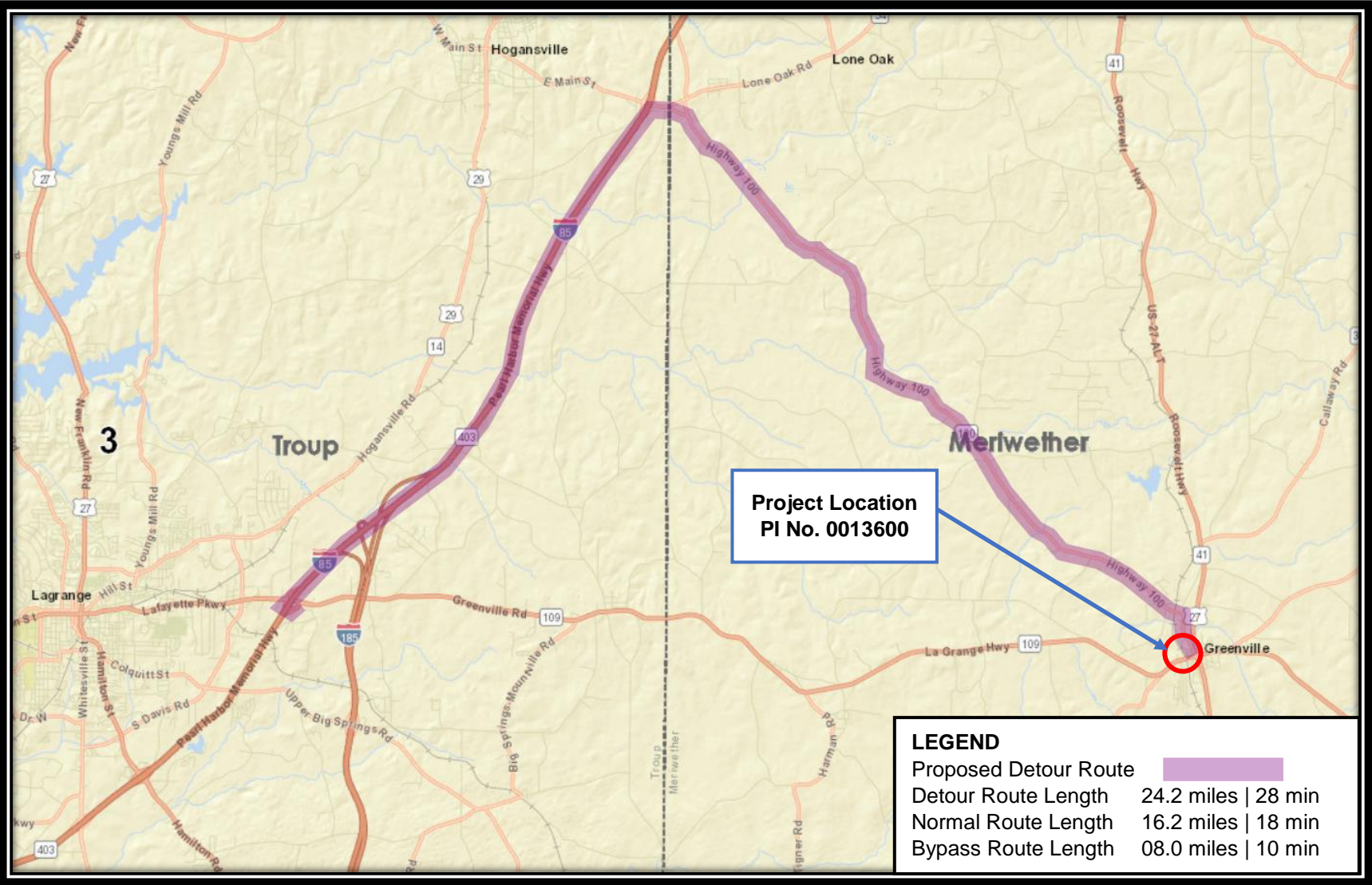
BRIDGE ID # 199-0047-0

	2017 (Existing Year)	2022 (Base Year)	2024 (Base Year +2)	2042 (Design Year)	2044 (Design Year + 2)
AADT	3550	3725	3800	4550	4650
DHV (AM/PM)	255/295	270/ 310	275/315	330/380	335/385
K% (AM/PM)	7%/ 8%				
D% (AM/PM)	53%/ 59%				
24 HR. T% - S.U.	8%				
24 HR. T% - COMB.	8%				
24 HR. T% - TOTAL	16%				
T% - S.U. (AM/PM)	9%/ 8%				
T% - COMB. (AM/PM)	7%/ 5%				
T% - TOTAL (AM/PM)	16%/ 13%				

If you have any questions concerning this information, please contact Dan Funk at 404-631-1959.

CLV/drj

PROJECT DETOUR MAP



Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:8/28/2017

Parameters: Bridge Serial Number

Bridge Serial Number: 199-0047-0

County: Meriwether

SUFF. RATING: 64.6

Location & Geography			218 Datum:		0- Not Applicable		Signs & Attachments	
Structure ID:	199-0047-0		*19 Bypass Length:	1			225 Expansion Joint Type:	02- Open or sealed concrete joint (silicone sealant).
200 Bridge Information:	06		*20 Toll:	3- On a Free Road or Non-Highway			242 Deck Drains:	0- None.
*6 Feature Intersected:	NORFOLK SOUTHERN RR.		*21 Maintenance Responsibility:	01-State Highway Agency.			243A Parapet Location:	0- None present.
*7A Route Number Carried:	SR00109		*22 Owner:	01-State Highway Agency.			243B Parapet Height:	0.00
*7B Facility Carried:	SR 109		*31 Design Load:	2- H 15			243C Parapet Width:	0.00
9 Location:	IN GREENVILLE		37 Historical Significance:	5- Not eligible for the National Register of Historic Places			238A Curb Height:	0.7
2 GDOT District:	4841300000 - D3 District Three Thomaston		205 Congressional District:	003			238B Curb Material:	1- Concrete.
*91 Inspection Frequency:	24	Date: 03/22/2016	27 Year Constructed:	1937			239A Handrail Left:	1- Concrete.
92A Fracture Critical Insp. Freq:	0	Date: 02/01/1901	106 Year Reconstructed:	0			239B Handrail Right:	1- Concrete.
92B Underwater Insp Freq:	0	Date: 02/01/1901	33 Bridge Median:	0-None			*240 Median Barrier Rail:	0- None.
92C Other Spc. Insp Freq:	0	Date: 02/01/1901	34 Skew:	0			241A Bridge Median Height:	0
* 4 Place Code:	35016		35 Structure Flared:	No			241B Bridge Median Width:	0
*5A Inventory Route(O/U):	1		38 Navigation Control:	N- Bridge is not over water			*230A Guardrail Location Direction Rear:	0- None.
5B Route Type:	3 - State		213 Special Steel Design:	0- Not applicable or other			*230B Guardrail Location Direction Fwrd:	0- None.
5C Service Designation:	1- Mainline		267A Type Paint Super Structure:	5- Waterborne System (Type VI or VII) Year : 2000			*230C Guardrail Location Opposing Rear:	0- None.
5D Route Number:	00109		267B Type Paint Sub Structure:	0- Not Applicable Year : 0000			*230D Guardrail Location Opposing Fwrd:	0- None.
5E Directional Suffix:	0. Not applicable		*42A Type of Service On:	5-Highway-Pedestrian			244 Approach Slab:	0- None.
*16 Latitude:	33 - 1.6824		*42B Type of Service Under:	2-Railroad			224 Retaining Wall:	1- Cast-in-Place Concrete.
*17 Longitude:	84 - 42.9648		214A Movable Bridge:	0			233 Posted Speed Limit:	25
98A Border Bridge:	0	98B: GA% 00	214B Operator on Duty:	0			236 Warning Sign:	No
99 ID Number:	0000000000000000		203 Type Bridge:	A- Spread footing. O. Concrete M. Steel O. Concrete			234 Delineator:	No
*100 STRAHNET:	0- The Feature is not a STRAHNET route.		259 Pile Encasement:	3			235 Hazard Boards:	No
12 Base Highway Network:	Yes		*43A Structure Type Main material:	3-Steel			237A Gas:	21- Bottom Left.
13A LRS Inventory Route:	1991010900		*43B Structure Type Main Type:	2-Stringer/Multi-Beam or Girder			237B Water:	00- Not Applicable
13B Sub Inventory Route:	0		45 Number of Main Spans:	3			237C Electric:	00- Not Applicable
101 Parallel Structure:	N. No parallel structure exists		44 Structure Type Approach:	A:0- Other B: 0- Other			237D Telephone:	32- Side Right.
*102 Direction of Traffic:	2- Two Way		46 Number of Approach Spans:	0			237E Sewer:	22- Bottom Right.
*264 Road Inventory Mile Post:	9.33		226 Bridge Curve:	A: Vertical: YesB: Horizontal: No			247A Lighting: Street:	No
*208 Inspection Area:	Area 03		111 Pier Protection:	N - Navigation Control item coded 0, or Feature not a waterway			247B Navigation:	No
*104 Highway System:	0- Inventory Route is not on the NHS		107 Deck Structure Type:	1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars			247C Aerial:	No
*26 Functional Classification:	6- Rural - Minor Arterial		108A Wearing Surface Type:	6. Bituminous			*248 County Continuity No.:	00
*204A Federal Route Type:	F - Primary.		108B Membrane Type:	8. Unknown			36A Bridge Railings:	2- Inspected feature meets acceptable construction date standards.
*204B Federal Route Number:	00051		108C Deck Protection:	8. Unknown			36B Transition:	0- Does not meet standards
105 Federal Lands Highway:	0. Not applicable		265 Underwater Inspection Area:	0			36C Approach Guardrail:	0- Does not meet standards
*110 Truck Route:	0- The Feature is not part of the National Network for Trucks						36D Approach Guardrail Ends:	0- Does not meet standards
217 Benchmark Elevation:	0000.00							
* Location ID No:	199-00109D-009.60E							

Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:8/28/2017

Bridge Serial Number: 199-0047-0

County: Meriwether

SUFF. RATING: 64.6

Programming Data		Measurements:			Ratings and Posting		
201 Project Number:	WPMG 2591-B	*29 AADT:	3250		65 Inventory Rating Method:	1-Load Factor (LF)	
202 Plans Available:	4- Plans in Infolmage.	*30 AADT Year:	2012		63 Operating Rating Method:	1-Load Factor (LF)	
249 Proposed Project Number:	000000000000000000000000	109 % Truck Traffic:	1		66A Inventory Type:	2 - HS loading.	
250A Reconstruction Approval Status:	No	* 28A Lanes On:	2		66B Inventory Rating:	31	
250B Route Approval Status:	No	*28B Lanes Under:	0		64A Operating Type:	2 - HS loading.	
250C Approval Status Definition:	0	210A Tracks On:	00		64B Operating Rating:	52	
250D Approval Status Federal:	0	210B Tracks Under:	1		231Calculated Loads		Posting Required
251Project Identification Number:	0013600	* 48 Maximum Span Length:	28		231A H-Modified:	21	No
252 Contract Date:	02/01/1901	* 49 Structure Length:	84		231B Type3/Tandem:	33	No
260 Seismic Number:	00000	51 Bridge Roadway Width:	29.8'		231C Timber:	37	No
75A Type Work Proposed:	0- Not Applicable	52 Deck Width:	42.0'		231D HS-Modified:	30	No
75B Work Done by:	0- Initial Inventory	* 47 Total Horizontal Clearance:	29.8'		231E Type 3S2:	40	No
94 Bridge Improvement Cost:(X\$1,000)	\$328	50A Curb / Sidewalk Width Left:	5.0		231F Piggyback:	40	No
95 Roadway Improvement Cost: (X\$1,000)	\$33	50B Curb / Sidewalk Width Right:	5.0		261 H Inventory Rating:	18	
96 Total Improvement Cost: (X\$1,000)	\$492	32 Approach Rdwy. Width:	35.0'		262 H Operating Rating:	35	
76 Improvement Length:	0.0'	*229 Approach Roadway			67 Structural Evaluation:	5	
97 Year Improvement Cost Based On:	2013	Rear Shoulder Left: Width:	0	Right Width:0.0	58 Deck Condition:	5 - Fair Condition	
114 Future AADT:	4875	Fwd Shoulder: Left Width:	0	Right Width:0.0	59 Superstructure Condition:	5 - Fair Condition	
115 Future AADT Year:	2032	Rear Pavement: Width:	36.0	Type:2- Asphalt.	* 227 Collision Damage:		
		Forward Pavement: Width:	35.0	Type:2- Asphalt.	60A Substructure Condition:	6 - Satisfactory Condition	
		Intersection Rear:	0	Forward:1	60B Scour Condition:	N - Not Applicable	
					60C Underwater Condition:	N - Not Applicable	
Hydraulic Data		53 Minimum Vertical Clearance Over Rd:	99' 99"		71 Waterway Adequacy:	Not Applicable.	
113 Scour Critical:	N. Bridge not over waterway.	54A Under Reference Feature:	R- Railroad beneath structure.		61 Channel Protection Cond.:	Not Applicable.	
216A Water Depth:		54B Minimum Clearance Under:	19' 7"		68 Deck Geometry:	4	
216B Bridge Height:		*228 Minimum Vertical Clearance			69 UnderClr. Horz/Vert:	N	
222 Slope Protection:		228A Actual Odometer Direction:	99'99"		72 Approach Alignment:	6-Minor reduction of vehicle operating speed required.	
221A Spur Dike Rear:		228B Actual Opposing Direction:	99'99"		62 Culvert:	N - Not Applicable	
221B Spur Dike Fwd:		228C Posted Odometer Direction:	00'00"		70 Bridge Posting Required:	5. Equal to or above legal loads	
219 Fender System:	0- None.	228D Posted Opposing Direction:	00'00"		41 Struct Open, Posted, CL:	A. Open, no restriction	
220 Dolphin:		55A Lateral Underclearance Reference:	R- Railroad beneath structure.		* 103 Temporary Structure:	No	
223A Culvert Cover:	000	55B Lateral Underclearance on Right:	10.2000000000000001		232 Posted Loads		
223B Culvert Type:	0- Not Applicable	56 Lateral Underclearance on Left:	0.0		232A H-Modified:	00	
223C Number of Barrels:	0	10A Direction of Travel for Max Min:	0		232B Type3/Tandem:	00	
223D Barrel Width:	0.0	10B Max Min Vertical Clearance:	99'99"		232C Timber:	00	
223E Barrel Height:	0.0	245A Deck Thickness Main:	6.5		232D HS-Modified:	00	
223F Culvert Length:	0.0	245B Deck Thickness Approach:	0.0		232E Type 3s2:	00	
223G Culvert Apron:		246 Overlay Thickness:	2		232F Piggyback:	00	
39 Navigation Vertical Clearance:	0'				253 Notification Date:	02/01/1901	
40 Navigation Horizontal Clearance:	0				258 Federal Notify Date:	02/01/1901	
116 Navigation Vertical Clear Closed:	0						

MEETING Summary

SUBJECT: PI 0013600 Concept Team Meeting
LOCATION: GDOT District 3 Office, Thomaston, Auditorium A
DATE: 12/5/2017 at 12:00 PM
ATTENDEES: See Sign-in Sheet
COPIES: Attendees
MINUTES BY: Abbas Eshagieh-Meybodi, PE
ISSUE DATE: 12/18/2017

Ben introduced the project.

Ben presented the project details and read the justification statement.

The existing bridge was designed for H-15 vehicle, which is below the current design standards.

SR 109 is classified as a rural minor arterial

Existing typical section has 16' lanes with curb & gutter and sidewalk on both sides of roadway.

SR 109 runs East-West over an abandoned rail path previously owned by Norfolk Southern. TYO, Inc. currently owns this property. The track rails have been removed.

The speed limit noted on the concept report is 25 mph. City of Greenville officials noted that the posted speed limit has been changed to 35 mph.

Pedestrian warrant is met.

It is proposed that the bridge be removed and replaced with fill.

Meriwether County and City of Greenville officials asked that a culvert be considered to provide pedestrian access. They stated this could be used as a multi-use trail in the future.

Meriwether County and City of Greenville officials asked that decorative barrier be considered along the proposed embankment. They stated this would be in line with the historic feel of the city and that the locals decorate the railing every year for Christmas.

Bridge will be replaced with fill at current location but at a lower elevation now that rail clearance is not required.

Offsite truck detour presented in draft concept report is 24 miles long. The normal route length is 16 miles long.

City of Greenville officials proposed that detour for local traffic be routed from Hill St to Terrell St to GA-18 instead of the current proposed local detour route of Hill St to Terrell St to Newman St. They stated the current proposed detour route is not wide enough for two lanes of traffic.

5.5' sidewalk was selected per bridge manual (based on section with curb).

The proposed typical section includes 16' lanes, curb and gutter, 0'-6' grass strip, 5' sidewalk and the remainder of the shoulder to total 10' to 16' – to match existing typical section.

Existing ROW along the proposed project corridor is 50'.

Preferred alternate is off-site detour because it would reduce the project foot-print



and disturbed area; therefore the impact to the potential historic properties within the project limits would be minimized. This alternative is also the most cost effective alternative.

No Design Variances or Design Exceptions are anticipated.

SUE is required.

City of Greenville officials had concerns regarding costs related to their utilities – Water and Sewer- along the project corridor. They were advised by district utilities representative that if it would be a hardship for them they could possible apply for aid.

Utilities will be impacted for this project.

Utility cost estimate have been provided.

Volkert had revised ROW needs and send to Jeff for estimate.

\$1.2 million is current construction cost estimate.

The current programmed cost for ROW is \$250k. Per Jeff this amount is not being used as part of our cost estimate. Currently awaiting ROW cost by GDOT; this has been marked as “Pending” in the Draft Concept Report.

Total cost is estimated at \$1.9 million - excluding ROW cost.

Alternates: Preferred alternate is off-site detour. Other alternates considered include no build and stage construction to maintain one-way traffic.

PURPOSE: PI 0013600
 LOCATION: District 3 office, Thomas
 DATE: 12-5-2017 TIME: 12:00 PM
 MODERATOR: Ben Rabun, Volkert

NAME	ORGANIZATION	PHONE NO.	E-MAIL ADDRESS
1 <u>GENE McKISSICK</u>	<u>GDOT D3 UTILITIES - CONTRACT</u>	<u>706-646-7604</u>	<u>gmckissick@dot.ga.gov</u>
2 <u>STAFFORD TAYLOR</u>	<u>GDOT D3 TRAFFIC OPS</u>	<u>706-646-7592</u>	<u>staylor@dot.ga.gov</u>
3 <u>Richard Lee</u>	<u>GDOT D3 AS</u>	<u>678 332 8960</u>	<u>r.lee@dot.ga.gov</u>
4 <u>ROBERT MORELAND</u>	<u>CITY OF GREENVILLE</u>	<u>706 977 5696</u>	<u>bmorland@dot.ga.gov</u>
5 <u>SANDY GARRETT</u>	<u>CITY OF GREENVILLE</u>	<u>706 977 8406</u>	<u>s.garrett@meriwethercounty.ga.gov</u>
6 <u>CHARLENE R. GLOVER</u>	<u>"</u>	<u>706 872-1216</u>	<u>greenvillemayor@bellsouth.net</u>
7 <u>WAYNE FRAZIER</u>	<u>CITY OF GREENVILLE</u>	<u>706-977-5698</u>	<u>Chief@greenvillepolice.com</u>
8 <u>Tyrell Johnson</u>	<u>Meriwether Co. Public Works</u>	<u>706-977-8673</u>	<u>t.johnson@meriwethercountyga.gov</u>
9 <u>Theron Gay</u>	<u>Meriwether Co Administration</u>	<u>706-672-1314</u>	<u>tgay@meriwethercountyga.gov</u>
10 <u>Alfred McCoy</u>	<u>Meriwether Co Vice Pres</u>	<u>770-227-9055</u>	<u>Alfredmccoy@aol.com</u>
11 <u>David English</u>	<u>GDOT Eng. Services</u>	<u>706 975 3680</u>	<u>denglish@dot.ga.gov</u>
12 <u>Constantine Flint</u>	<u>GDOT Construction</u>	<u>706-646-7506</u>	<u>cflint@dot.ga.gov</u>
13 <u>Shawn Buckley</u>	<u>GDOT D3 Recon</u>	<u>706-646-7574</u>	<u>sbuckley@dot.ga.gov</u>
14 <u>Michael Margut</u>	<u>ATKINS</u>	<u>770-930-0280</u>	<u>Michael.Margut@atkinsglobal.com</u>
15 <u>JEFF CLAYTON</u>	<u>GDOT OPD</u>	<u>678-730-1875</u>	<u>jclayton@dot.ga.gov</u>
16 <u>Abbas Eshaghi-Meybodi</u>	<u>Volkert</u>	<u>678-271-0202</u>	<u>abbas.eshaghi@volkert.com</u>
17 <u>Ben Rabun</u>	<u>Volkert</u>	<u>"</u>	<u>ben.rabun@volkert.com</u>
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20			
21			
22			
23			
24			
25			
26 <u>Carol Kalafut</u>	<u>GDOT</u>	<u>via video conference</u>	
27 <u>Suncica Beba</u>	<u>GDOT</u>	<u>via phone</u>	
28			